

REMARKS

I. Claims 13, 14, and 21 Are Definite

Regarding claims 13, 14, and 21, the Office Action asserted that the term "about" renders these claims indefinite per M.P.E.P. §2173.05(d), "Exemplary Claim Language ('for example', 'such as')". However, since the term "about" is a relative term the claim is definite per M.P.E.P. §2173.05(b) "Relative Terminology".

II. The Objection to Claim 15 Is Moot

Regarding claim 15, the Office Action objected to the limitation "a lubricant" being listed twice. In view of the amendment submitted herewith it is believed that the objection has been rendered moot. Further, since the amendment corrects a typographical error the claim has not been narrowed and no claim coverage has been surrendered.

III. Because Hausladen Fails To Disclose A Liquid That Is Able To Retain An RFID Tag The Invention is Non Obvious.

In the Office Action, the Examiner rejected claims 1-4, 7, 9-17, and 20-24 under 35 U.S.C. §103 as being unpatentable over Canadian patent application No. 2,345,883 by Hausladen et al. (hereinafter "Hausladen"). More particularly, the Examiner asserted that it would have been obvious that the RFID tag of Hausladen would be able to withstand liquid environments such as automobile painting and therefore using the RFID tag as a part of the automobile paint mixture [would have been obvious].

However, claim 1 recites a liquid that is able to retain the tag when the liquid is applied to a surface. The current application specifically states that the liquid may be chosen based on various mechanical properties such as surface tension and viscosity so that the tags tend to remain in the liquid regardless of the orientation of the surface. Likewise, the properties of the tag may be selected to enhance the ability of the liquid to retain the tags. For instance, the tag density, weight, size, and wettability may be chosen to cause the tags to remain in the liquid even when applied to a vertical (or inverted) surface. See page 5, lines 15-20.

In contrast to the claimed invention, Hausladen is directed toward inlets [RFID tags] that are captured between a coating and a face stock. See page 8, lines 1-3. While Hausladen describes the selection of the coating and face stock for resistance to heat and aggressive liquids (see page 5 line 9 to page 6, line 10), the reference never discusses whether the liquids

are capable of retaining the RFID tags or the selection of the properties of the paint or the RFID tag that would allow the paint to retain the tags.

Accordingly, Hausladen fails to disclose a liquid that is able to retain the tag as required by claim 1. Therefore the Applicant requests that the rejection of claim 1 and the claims dependent therefrom, claims 2-4, 7, and 9-11, be withdrawn. For similar reasons the Applicant request that the rejection of claims 12-17 and 20-24 be withdrawn.

IV. Claim 7 is Non Obvious Because Hausladen Fails To Disclose Identifying the Liquid With The RFID Tag.

With regard to claim 7, the Office Action asserts that it is obvious that the RFID tag is read to identify the liquid that it is placed into. However, claim 7 incorporates by reference introducing the tag into a liquid and reading the tag to identify the product. Further, claim 7 recites identifying the liquid. In contrast, Hausladen is directed toward RFID tag/labels that are resistant to high temperature and aggressive fluids that will not fall off or lose printed material on the face stock of the label/tag. See page 4, lines 1-14. Because Hausladen describes tag/labels that include printed material that must be visible to be read, the tag/labels must be intended for use on the exterior of a container. Thus, even if the tag/labels described by Hausladen are used on a container for a liquid these tag/labels identify the container, not the liquid in the container.

Furthermore, it is well known that on occasion a container labeled as containing one liquid may contain another completely different liquid. The label/tags described by Hausladen would fail to correctly identify the liquid in the container in such situations. In contrast, the RFID tags of the present invention would positively identify the liquid whether the container is incorrectly labeled. Thus, the claimed invention provides a result that is unexpected by Hausladen.

For the foregoing independent reason claim 7 is non obvious with respect to Hausladen. Accordingly, the Applicant requests that the rejection of claim 7 be withdrawn.

V. Claims 11, 13, and 14 Are Non Obvious Because Hausladen Teaches Away From Relatively Small RFID Tags.

With regard to claims 13 and 14, the Office Action asserts that it is well known that the user can utilize a tag of any size. However, Hausladen describes RFID tags that are captured between a coating and a face stock. See page 8, lines 1-3 and Figure 1. Capturing the RFID

tag between the coating and the face stock necessarily increases the overall size of the RFID tag assembly. Thus, Hausladen teaches away from the relatively small RFID tags recited in claims 13 and 14.

Moreover, because the RFID tag assemblies taught by Hausladen are relatively large it is unlikely that they could be used in a liquid process as recited by Claim 11. If an attempt were made to use these tags in a liquid process the tags would clog filters in the liquid system, cause valves to leak, and other unwanted and perhaps dangerous results. Accordingly, Hausladen teaches away from using the RFID tags in a liquid process. The Applicant therefore respectfully requests that the rejection of claims 11, 13, and 14 be withdrawn.

VI. *Because Being Very Light Does Not Ensure Neutral Buoyancy Claim 16 is Non Obvious.*

The Office Action also asserts that the claimed tags being neutrally buoyant in the liquid is met by the RFID tags being very light in comparison to automobile paint. However, to be neutrally buoyant, as recited in claim 16, the tag would have to have the same density as the paint. Therefore, a very light tag is not necessarily neutrally buoyant in the paint. Accordingly, the Applicant respectfully requests that the rejection of claim 16 be withdrawn for this independent reason.

VII. *Because Hausladen Fails To Disclose an RFID Tag In A Granular Solid Claim 24 is Non Obvious.*

The Office Action also asserts that it is well known in the art that RFID tags are used to identify the products with which they are attached. However, claim 24 recites that the RFID tags are in the granular solid rather than being attached thereto.

As with claim 7, discussed above, it is known in the art that containers are sometimes filled with a material that does not match the label attached to the container. The present invention allows that material (i.e. a granular solid) to be identified whether its container is properly labeled. Accordingly, the claimed invention provides the unexpected result of allowing the granular solid to be identified regardless of the labeling of its container. Therefore, the Applicant respectfully requests that the rejection of claim 24 be withdrawn.

With further reference to the rejection of Claim 24, the Office Action also asserted that claim 24 is rejected as a non-interactive combination. However, as set forth above, since the RFID tags are in the granular solid the RFID tags interact with the granular solid by allowing

identification of the granular solid whether its container is properly labeled. Accordingly, the Applicant requests that the rejection for lack of interaction be withdrawn.

VIII. *Because Neither Hausladen Nor Moscaritolo Discloses A Liquid That Is Able To Retain An RFID Tag Claims 5, 6, and 18 Are Non Obvious.*

Turning now to the rejection of claims 5, 6, and 18, the Office Action rejected the subject claims under 35 U.S.C. § 103 as being unpatentable over Hausladen in view of U.S. Patent No. 6,736,989 by Moscaritolo (hereinafter "Moscaritolo").

As discussed above, Hausladen fails to disclose a liquid that is able to retain an RFID tag as is required by each of claims 5, 6, and 18. Thus, for the proposed combination to render the subject claims obvious, Moscaritolo must disclose a liquid that is able to retain an RFID tag. However, Moscaritolo is directed toward a filter module that may incorporate MEMS sensors to measure various characteristics of the fluid flow and filtration. See the Abstract. Otherwise, the Applicant has diligently searched Moscaritolo without finding a disclosure of a liquid that is able to retain an RFID tag.

Since neither Hausladen nor Moscaritolo discloses a liquid that is able to retain an RFID tag the proposed combination fails to render the claimed invention obvious. Accordingly, the Applicant respectfully requests that the rejection of claims 5, 6, and 18 be withdrawn.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, he is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "R. Villhard", is written over a horizontal line.

Robert L. Villhard, Reg. 53,725
Thompson Coburn LLP
One US Bank Plaza
St. Louis, Missouri 63101
Telephone: (314) 552-6293
Fax: 314-552-7293